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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,613	12/01/2000	Yoshiyuki Okubo	L9289.00124	7932

7590 02/06/2004  
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EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
2685	6

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/701,613

Applicant(s)

OKUBO ET AL.

Examiner

SIMON D NGUYEN

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-,4-6, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Austin-Lazarus et al. (5,422,831).

Regarding claim 1, Austin-Lazarus discloses a communication terminal device (fig.2), comprising: a first modulator/demodulator that applied modulation/demodulation processing o a voice signal; a second modulator/demodulator that applied modulation/demodulation processing on a data signal; means for determining a type of signals; and a controller for selecting the first or second modulator/demodulator (fig.2, column 5 line 39 to column 6 line 59). It should be noted that since Austin-Lazarus discloses the data modulating/demodulating process, which inherently includes a high-speed or a low-speed data.

Regarding claim 13, this claim is rejected for the same reason as set forth in claim 1.

Regarding claims 4-6, Austin-Lazarus discloses the terminal device connected to an external device (a fax machine, or a computer) for transmitting data (column 6 line 55-59) and wherein means for determining the type of communication based on how the

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terminal device is connected and information of control signal demodulated by the first or second modulator/demodulator (column 5 line 65 to column 6 line 9).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 7-12, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin-Lazarus et al. (5,422,931) in view of Lee (6,169,733).

Regarding claims 2, 3, 7-8, Austin-Lazarus discloses a first mode is a FM mode and a second mode is a TDMA (column 7 lines 57, 67). However, Austin-Lazarus does not specifically disclose a CDMA mode and a HDR (high data rate) mode and a third modulator/demodulator.

Lee discloses a triple-mode communication system, comprising: a TDMA, a CDMA, and AMPS modes having a processor for determining which of the three systems is being used and appropriate processing, demodulating is carried out (abstract, figs.1, 4a-4b) wherein the AMPS is a HDR which is known to one skilled in the art. It also notes that Lee system is the triple-mode system, which inherently includes a third modulator/demodulator and the controller selects either one of the three modes. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Austin-Lazarus, modified by Lee in order to execute the voice signal

in a TDMA and the data signal in a CDMA or execute the voice in a CDMA and the HDR in an AMPS in order to improve the system performance for different standard modes.

Regarding claim 9, Austin-Lazarus discloses a communication terminal device (fig.2) communicate with a base station in a cellular communication system ((fig.1), comprising: a first modulator/demodulator that applied modulation/demodulation processing a voice signal; a second modulator/demodulator that applied modulation/demodulation processing on a data signal; means for determining a type of signals; and a controller for selecting the first or second modulator/demodulator (fig.2, column 5 line 39 to column 6 line 59). It should be noted that the Lee's terminal device is a dual mode, therefore, the base station inherently having the same dual mode to allow the base station receives and processes by the respective signals (column 5 lines 1-27). However, Austin-Lazarus does not specifically disclose a third modulator/demodulator.

Lee discloses a triple-mode communication system, comprising: a TDMA, a CDMA, and APMS modes having a processor for determining which of the three systems is being used and appropriate processing, demodulating is carried out (abstract, figs.1, 4a-4b) It should be noted that Lee system is the triple-mode system, which inherently includes a third modulator/demodulator. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Austin-Lazarus, modified by Lee in order to execute the voice, data, and high speed data in a communication system in order to improve the system performance for different standard modes.

Regarding claims 10-11, 14-15, these claims are rejected for the same reason as set forth in claims 2-3.

Regarding claim 12, this claim is rejected for the same reason as set forth in claim 7.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alouini et al. (6,304,593) disclose two modulation/demodulation schemes, a first one is for voice, and a second one is for a high data rate (abstract); Maegawa et al. (6,269,253) and Stein (W0 98/58511) disclose multiple mode communication systems for communication between a mobile device and a base station wherein each mode processes and modulate/demodulate according to the selected operation mode; Koga (6,085,109) discloses a communication system having a base station and a mobile station wherein the system comprises three modulating/demodulating units for processing different types of signals (fig.4); Hiramatsu discloses a communication system in which a base station having first, second, third modulator/demodulators for transmitting a high-speed data and a low-speed data (fig.3); the abstract of JP 10-327463 (in the Applicant's prior art) discloses a terminal device having two modulation/demodulation schemes in which a switchover selects one modulation/demodulation according to control means (abstract).

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

February 4, 2004

A handwritten signature in black ink that reads "Simon Nguyen". The signature is written in a cursive, flowing style.